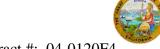
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006091 Address: 333 Burma Road **Date Inspected:** 06-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: Tower Fabrication**

Summary of Items Observed:

CWI Inspectors Mr. Wu Ming Kai, Mr. Lia Zhong An, Mr. Chen ying Xin

On this date CALTRANS OSM Quality Assurance (QA) Inspector Mr. Paul Dawson arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Tower Bay 10

This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of North Tower Lift 2 Skin plate C stiffener to skin plate welds NSD1-SA171C/D-2, NSD1-SA171A/D-10, NSD1-SA171A/D-11, NSD1-SA171A/B-12, NSD1-SA171A/D-13 and NSD1-SA171A/D-27. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that was ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

OBG Bay 5

ZPMC Notification of Witness Inspection document 002169 states welds NSD1-SA171A/D-26 and NSD1-SA171A/D-28 are ready for QA ultrasonic inspections. The QA Inspector visually observed welds NSD1-SA171A/D-26 and NSD1-SA171A/D-28 are marked as being ultrasonically accepted and that each of these

WELDING INSPECTION REPORT

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two welds have a grinding gouge in the termination of the welds. The QA Inspector informed ABF representative Mr. Xiao Jun Peng that the welds that had been ultrasonically accepted are visually rejected and that after the welds are repaired a new ultrasonic inspection will be required.

The QA Inspector observed ZPMC welder Mr. Zhu Zhongyun, stencil 057194 is using flux cored welding procedure WPS B-T-2232-TC-P5-F to make stiffener plate to tower skin plate weld NSD1-SA61-G/G-1B. The QA Inspector observed that the base material had been preheated using electrical heater elements. The QA Inspector observed ZPMC Quality Control personnel measuring Mr. Zhu Zhongyun having a welding current of approximately 330 amps and 30.0 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

The QA Inspector observed ZPMC welder Mr. Chang ChuanGang, stencil 053870 is using flux cored welding procedure WPS B-T-2232-TC-P5-F to make stiffener plate to tower skin plate weld NSD1-SA61-F/G-19B. The QA Inspector observed the base material had been preheated using electrical heater elements. The QA Inspector observed ZPMC Quality Control Inspector Mr. Liu Zhong An monitoring this welding. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

The QA Inspector observed ZPMC has staged steel plates on a wet portion of the concrete floor in heavy bay #10 and that the plates are not stored on dunnage as required by the project specifications. The QA Inspector informed ZPMC QC CWI Mr. Chen Ying Xin that the plates are improperly stored and Mr. Xhen Ying Xin had the plates placed on pieces of wood. See the photograph below for additional information.

Tower Bay 11

This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of Tower Lift 3 Skin plate butt welds SSD1-FES3-2A/D-13, SSD1-FES3-2A/D-18, SSD1-FES3-2A/D-22 and SD1-FES3-2A/D-22. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that was ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.





WELDING INSPECTION REPORT

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Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod phone: 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer